U.S. Environmental Protection Agency (EPA)
Science and Technology Policy Council (STPC)
National Research Council (NRC)
Risk Assessment Workgroup Meeting

Teleconference Minutes

March 20, 2014; 2:30 – 3:40 p.m. EDT
Call-In Phone Number: Teleconference Line / Ex. 6 **Code:** Teleconference Line / Ex. 6

ATTENDEES

Tom Brennan (SABSO), Beth Doyle (OW), Brenda Foos (OCHP), Jocelyn Hospital (OIE), Anna Lowit (OPP), Carl Mazza (OAR), Anand Mudambi (OSA), Edward ("Ed") Ohanian (OW/Co-Chair), Marian Olsen (R2), Kathleen Raffaele (OSWER), Ann Williamson (R10), David Clarke (SCG, Inc., Contractor)

MAIN MEETING AGENDA ITEMS

Roll Call

- Edward ("Ed") Ohanian (OW/Co-Chair) opened the meeting and called the roll.

Review March 13, 2014, NRC Workgroup Meeting Minutes/Action Items

- Anand Mudambi (OSA) reviewed the action items. He noted that Michael Bender (OSA) had not distributed his revised implementation table before going on leave, so the first action item was deemed incomplete. The other action items were deemed either ongoing or complete.
  - Members decided that the Workgroup will not hold a meeting next week because most members will be attending the Society of Toxicology meeting.
  - Ed stated that he will be meeting with Linda Birnbaum, the director of the National Institute of Environmental Health Sciences (NIEHS) on March 26, 2014, to discuss Dr. Birnbaum's stated willingness to have NIEHS participate in the Workgroup's implementation activities as appropriate. He asked for Workgroup members' suggestions on what he should discuss with her. Ed also asked Anand by March 21, 2014, to send him a PowerPoint presentation that EPA Science Advisor Glenn Paulson made to the NRC's Board on Environmental Studies and Toxicology (BEST). No other Workgroup documents are public at this time.
  - Members suggested providing Dr. Birnbaum with a verbal overview of the Workgroup's activities similar to the one presented to the STPC. Carl Mazza (OAR) suggested asking her what she thinks would be useful efforts, given Dr. Birnbaum's prior tenure with EPA. Ed also will propose a conference call involving the Workgroup and NIEHS.

Discuss Resource Levels for Recommendation 6-1

- Anand posted Brenda Foos' (OCHP) writeup of an implementation plan for Recommendation 6-1 on Adobe® Connect and she reviewed the draft. She noted that Recommendation 6-1 was the one remaining activity in the prenatal category because the other activity was integrated into the Unified Dose Response category. Brenda's draft included resources for activities that might address the NRC recommendations regarding prenatal and modes of action issues for early life carcinogenicity.
  - Brenda explained that her proposed approach for addressing Recommendation 6-1 involved four steps encompassing a 2-year timeframe: (1) data scoping to determine the data that are available from the National Toxicology Program and the Food and Drug Administration and to access the data; (2) analysis scoping to define what type of analysis is needed given the data identified; (3) actual data analysis, which Brenda proposed should be conducted by a scientific expert contractor; and (4) analysis review, conclusions and publication. She briefly described each step and Workgroup members offered comments.
  - Brenda stated that for her third step, data analysis, she proposed the Office of Research and Development (ORD) to be the lead organization. She could not define the funding, which might combine ORD science and technology funding with funds from other programs. The Office of Children's Health Protection (OCHP) cannot afford the entire project. Brenda noted that an item listed under her second step (ii. Extramural resources . . .) should be moved to her third step.
  - The most difficult activity might be the fourth step because it will assess whether the data analysis findings enable EPA to address the NRC recommendation. The results should be published.
  - Members discussed the implications if a program decides it wants to move an activity on a fast track. That could imply having either a contractor or a task force do the work; after that initial decision, the interested program would determine what resources it would provide for the project.
  - Carl noted that in international meetings, agreements regarding ability to contribute to a project are often reached behind the scenes prior to a meeting, rather than being decided on-the-spot. Brenda and others agreed with Carl's point. Brenda added that she had hoped ORD would attend the Workgroup's meeting, but even if ORD members Weihsueh Chiu (ORD) or Vincent Cogliano (ORD) had attended, decisions might need to be made at a higher level within the office. She agreed to contact her ORD colleagues to discuss Recommendation 6-1.
  - Carl suggested changing the title of Brenda's writeup, replacing the words "research initiative" with "data review." Other members made suggestions and Brenda agreed to incorporate the suggestions in a revised draft.
  - A member suggested defining a goal for the analysis scoping described in Brenda's second step. Brenda responded that the goal will depend on the data received in the first step but agreed to reword the language to respond to the suggestion about the need for a goal. Carl noted that EPA is often criticized for being inconsistent with California EPA's prenatal/early life carcinogencity guidance.
  - Carl raised issues concerning the publication called for in Brenda's fourth step, noting that individual scientists are free to publish with the disclaimer that the article

represents an individual's views. Anand suggested an EPA publication. Brenda expressed reluctance because that would delay publication. Carl commented that EPA will have to determine if the data received in step one were useful and communicate its findings. Brenda responded that a fifth step would be needed for that activity. Members discussed a possible step to capture the need for EPA to assess and communicate the implications for the Agency of the data and analysis. The step would involve STPC reviewing the results.

- Anna Lowit (OPP) noted that she was skeptical about pursuing Recommendation 6-1 activities because it is unclear that the results would be relevant to any Agency decisions. Marian Olsen (R2) asked if it would be possible to develop a description early in the implementation process of the various issues and costs associated with new rat studies and related matters that could result from Recommendation 6-1. Carl responded that his assumption was that no testing would be done unless EPA concludes that an alternative test protocol would be more predictive, in which case Marian's issues would be important. Members pointed out other implications beyond changing protocols, such as addressing uncertainty factors.
- Anna stated that her recollection of Recommendation 6-1 was that the Workgroup agreed to add an Adverse Outcome Pathway (AOP) component, but Brenda's writeup did not include that item. Brenda responded that the issue was in her introductory paragraph providing an implementation plan summary. She agreed that the AOP should be in steps one and two.

Discuss Workgroup Writeups on Recommendation 4-1

- Anna stated that she had not received any comments on her writeup of Recommendation 4-1—*White Paper on Explicit Defaults in Reference Value Methodology*—so the draft is unchanged from the version discussed at the March 13, 2014, meeting. Anand posted the Recommendation 4-1 writeup on Adobe® Connect.
  - Anna noted that she had not changed the draft because she did not believe the Workgroup had a clear consensus on the scope of the implementation plan for Recommendation 4-1. At the previous meeting, members discussed the intended depth of the project. Some members envisioned a white paper providing a cursory listing of defaults and description of next steps; others envisioned an in-depth analysis of existing data to better inform issues such as the chronic-to-subchronic factor. A cursory white paper could be done within a limited timeframe, but an in-depth study would be a completely different project.
  - Responding to a question a member raised, it was agreed that Dan Axelrad (OP), who drafted the original writeup, should be tasked with conducting a further elaboration of Recommendation 4-1 and developing additional options as to the depth of the white paper for the Workgroup to consider at its next meeting in 2 weeks. Ed emphasized that Dan's further elaboration should identify the specific defaults NRC was concerned about and that would be addressed in a white paper.
  - Anna stated that STPC members have been asked to comment on the implementation plan but could not do that until the project's scope is clear.

ACTION ITEMS

1. Anand will send Dr. Paulson's BEST presentation to Ed by March 21, 2014.
2. Brenda will discuss with ORD colleagues the office's ability to help co-lead and participate in the implementation of Recommendation 6-1.
3. Brenda will revise her writeup of the implementation plan for Recommendation 6-1 based upon the comments she received during the March 20, 2014, meeting.
4. Dan will develop additional implementation options addressing the depth of the Recommendation 4-1 white paper for the Workgroup to discuss at its next meeting.